

## **REMARKS**

Applicants have amended Claims 1, 6, 8 and 9. Support for the amendment can be found at page 4, lines 1-6. Applicants respectfully submit that no new matter has been added by the present amendment.

Applicants have cancelled Claims 16-19 without prejudice or disclaimer. Applicants have added new Claims 20 and 21, support for the amendment can be found generally through out the text, specifically at page 6, lines 13-27.

### **I. Claims Rejections - 35 U.S.C. § 112**

Claims 1, 2, 4-10 and 13-15 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants respectfully traverse this ground of rejection. Due to the present amendment Applicants respectfully submit this rejection is moot.

As disclosed on page 4, lines 1-6, component A can include double bond containing rubber which have been modified by functional groups that are capable of reacting with isocyanates. Applicants' withdrawal their earlier statements in the Responses dated 9/13/2002 and 4/4/2003 that neither components A or B of the present invention contain functional groups that will react with an isocyanate.

Applicants submit that the pending claims are not anticipated by Dammann, et al. (U.S. Patent No. 5,232,531) or JP 57-212239 or JP 5-17630. Applicants submit that in order to anticipate a claim, the cited reference **must teach each and every element of the claimed invention**. Applicants respectfully submit that Dammann, et al. or JP 57-212239 or JP 5-17630 fail to teach each and every element of the claimed invention.

Dammann, et al. discloses an adhesive for use with elastomeric substrates such as EPDM roofing materials. The adhesive combines **butyl rubber** crosslinked after polymerization, **halogenated butyl rubber**, **tackifying resin**, and an **isocyanate** partially reacted with a diamine. According to the disclosure of Dammann, et al. the butyl rubber crosslinked after polymerization is "crumb rubber" for which neither the diameter or the degree of crosslinking are specified in any greater detail. See U.S. Patent No. 3,704,274 which is cited by Dammann, et al. and discloses that the butyl rubber is crumb rubber. Applicants submit that one skilled in

the art would generally recognize that crumb rubber is measured in the range of mm's and cm's, not nm's. Accordingly, Applicants respectfully submit that Dammann, et al. does not teach or suggest a rubber composition which comprises crosslinked rubber particles having particle diameters of from 5 to 1000 nm and swelling indices in toluene of from 1 to 15 and wherein the gel content of the rubber particles is from 80 to 100 wt.%. Therefore, Applicants submit that Dammann, et al. fails to teach or suggest each and every element of the claimed invention.

Applicants respectfully submit that JP 57-212239 fails to anticipate the present invention. JP 57-212239 discloses a mixture of the following components: a rubber consisting of (i) 70 – 95 parts of solid rubber and (ii) 30 – 5 parts of liquid rubber; (B) a masked isocyanate; and (C) Novolac. Applicants respectfully submit that JP 57-212239 does not teach or suggest a rubber composition which comprises crosslinked rubber particles having particle diameters of from 5 to 1000 nm and swelling indices in toluene of from 1 to 15 and wherein the gel content of the rubber particles is from 80 to 100 wt.%. Therefore, Applicants submit that JP 57-212239 fails to teach or suggest each and every element of the claimed invention.

Applicants respectfully submit that JP 5-17630 discloses a mixture containing a powdered rubber, a rubber solution containing, in an inert solvent, of a hydroxyl-modified liquid rubber and a polyfunctional isocyanate. The Applicants respectfully submit that JP 5-17630 does not disclose or suggest the presently claimed uncrosslinked rubber and/or a rubber gel.

As disclosed in the present invention at page 3, line 8 - page 4, line 8, uncrosslinked rubbers A are understood to be rubbers designated as R rubbers according to DIN/ISO 1629. According to DIN/ISO 1629, attached hereto, "the 'R' group, in both dry and latex forms, is defined by inserting, before the word 'rubber,' the name of the monomer or monomers from which the rubber was prepared." And "for latices, the designated symbol is followed by the word latex, e.g. 'SBR latex.'" Accordingly, Applicants draw attention to the fact that the pending Claims are clearly directed to rubbers which are not in the "latex" form, i.e. emulsion or liquid form. Applicants also submit the Declaration of Werner Obrecht, under 37 CFR 1.132 which further illustrates that one skilled in the art would understand that component

A is not a liquid rubber. Therefore, Applicants submit that JP 5-17630 fails to teach or suggest each and every element of the claimed invention.

Further, Applicants submit that Obrecht, et al. (DE 19701487), in view of Dammann, et al. or JP 57-212239 or JP 5-17630 fails to render the present invention obvious. As admitted in the Office Action dated June 18, 2002, Obrecht, et al. is silent regarding the addition of a polyisocyanate component to the composition.

Applicants remind the Examiner "in order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all the claims limitations. The teachings or suggestions to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicants' disclosure." See MPEP § 2142, citing In re Vaeck, 947 F.2d 488, 20 USPQ 2d. 1438 (Fed. Cir. 1991).

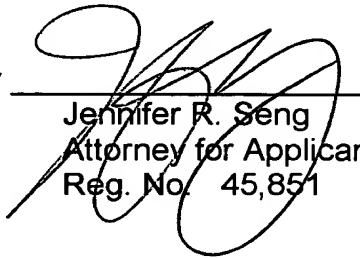
The issue of motivation is properly addressed in terms of one of ordinary skill in the art who has not had access to Applicant's Specification. As set forth by the Federal Circuit in In re Dow Chemical, 5 U.S.P.Q.2d 1529 (Fed. Cir. 1988) "the consistent criterion for determination of obviousness is whether the prior art would have suggested to one of ordinary skill in the art that this process should be carried out and would have a reasonable likelihood of success, viewed in the light of the prior art". The proper standard clearly required by the Federal Circuit is that "both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure".

As previously discussed, none of the cited secondary references contain a rubber gel, further, the Examiner has not identified any motivation to combine the polyisocyanates identified in the prior art references with a rubber composition which contains a rubber gel. Applicants also submit that the fact that the claimed invention is within the capabilities of one of ordinary skill in the art is not sufficient to establish *prima facie* obviousness.

**II. Claims Rejections - 35 U.S.C. § 112**

Claims 16-19 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Applicants have cancelled Claims 16-19 without prejudice or disclaimer and therefore submit that the present rejections are moot.

Respectfully submitted,

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**APPENDIX**

**Declaration of Werner Obrecht,  
U.S. Patent No. 3,704,274 and  
DIN/ISO 1629**